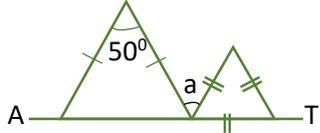
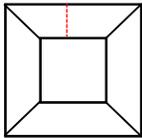
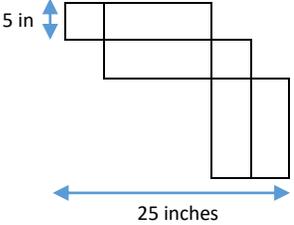


		Answers	Score
1.	The ratio of A to B is 3:4 and the ratio of B to C is 5:6. What is the ratio of A to C?	1.	
2.	Xin wants to lay carpeting on a 40×18 ft. room. How many <b>square yards</b> of carpet would she need?	2.	
3.	Two typists can type 2 pages in 4 minutes, how many typists will it take to type 10 pages in 20 minutes?	3.	
4.	What letter comes $\frac{2}{5}$ of the way between A and J?	4.	
5.	Answer as a decimal: what is 1% of 2% of 12 times $\frac{2}{3}$ ?	5.	
6.	In the puzzle same letters stand for the same digits, different letters stand for different digits. What number represents <b>BULL</b> ? $D=3, L=7, A=8$	6.	
	$\begin{array}{r} MAD \\ AS \\ + A \\ \hline BULL \end{array}$		
7.	Evaluate the expression: $17 - 3 \times \frac{1+13}{2 \times 3}$	7.	
8.	Sayan computes $84 \div (-2)$ , then divides the result by $-3$ . What is his result?	8.	
9.	 3 rectangular prism holes are cut out of a cube. How many faces does the resulting solid have?	9.	
10.	The average of X and Y is 20. The average of Y and Z is 15. The average of Z and A is 18. Find the average of X and A.	10.	
11.	This semester, the number of boys in a school band increased by 20% to 48 and the number of girls decreased by 20% to 48. How many members were there in the school band last semester?	11.	

12.	How many different ways can you choose 3 of these circles to get 19 as their sum? 	12.	
13.	AT is a straight line. Find $\angle a$ 	13.	
14.	JJ and his brother, Alan, both drove from their parents' house to the Lodge. Alan started his trip later than JJ. JJ arrived at the Lodge in 1 hour 12 min, driving at a speed of 60 mph. Alan drove at a speed of 80 mph and arrived at the same time as JJ. How many minutes after JJ did Alan start his trip?	14.	
15.	A square with an area $121 \text{ in}^2$ is made out of 4 congruent trapezoids and a smaller square with an area of $25 \text{ in}^2$ . What is the height of the trapezoid? 	15.	
16.	Find the values of the ones digit of $8^{25}$ .	16.	
17.	Coach ran 8 km in 40 min. He ran the first 4 km at a constant speed that was twice the constant speed at which he ran the last 4 km. At what speed, in km per hour, did the coach run his 3 <sup>rd</sup> km?	17.	
18.	Which of the following numbers has smaller value: $\frac{124}{421}$ or $\frac{124124}{421421}$ ?	18.	
19.	Elena and Tanvi received a compensation for completing a project. Elena's portion of the compensation is \$35. When Elena gave \$12 to Tanvi, Tanvi's share increased by 30%. Find the sum of money both girls received for the project.	19.	

20.	<p>The figure below shows the net of a rectangular tank with a square base. Find the greatest number of 2-inch cubes that can be put into the tank.</p> 	20.		
21.	<p>Ella and Bella wanted to buy some ice-cream. Ella was 53¢ short, Bella was 48¢ short. When they put together their money, they still don't have enough money for 1 ice-cream cone. What is the most amount of money the ice-cream cone could cost?</p> 	21.		
22.	<p>A month with 30 days had 5 Saturdays and 5 Sundays. On what day had to fall the first day of that month?</p> 	22.		
23.	<p>Somewhere in Alaska Erin, Mike and Ike go to the same school. Erin lives 250 miles north from the school, Mike lives 105 miles north of the school. Ike lives 140 miles west of the school. How many miles more Ike will have to snowmobile to Mike than Erin to Mike, if Ike is doing the shortest drive possible?</p>	23.		
24.	<p>Jessy has 3 non-zero integers and flips a coin to determine the sign of each. What is the probability that the product of the three resulting numbers is negative?</p>	24.		
25.	<p>Ben multiplies 3 different integers. The absolute value of each integer is less than 10. What is the least possible product of the 3 integers?</p>	25.		
<b>TOTAL SCORE</b>				

## MATH CHALLENGE TOURNAMENT MASTERS

February 27, 2016  
Individual Challenge

**Grade 5**

Sponsored By Ellipsis Academy



**FINAL SCORE:**

**LAST NAME:** \_\_\_\_\_

**FIRST NAME:** \_\_\_\_\_

**School:** \_\_\_\_\_ **Grade:** \_\_\_\_\_

### *PROBLEM SOLVING (30 minutes)*

- You may use scratch paper to do any calculations to reach final answers.
- Write your answers in this test booklet.
- Units are not necessary. If you choose to label your answer, please make sure you write the correct units. A correct answer with incorrect units will be marked as an incorrect answer.

There are 25 questions.

Correct answer: 5 points

Blank answer: 2 points

Incorrect answer: 0 points